HENKEL CONSUMER ADHESIVES 02/05/02

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 01 of 05

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite Quick Set Epoxy Gel
Item number: Resin (A) Part of kit: 01-32427

Product Type: Epoxy resin

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient CAS Number % Exposure Limits

Epoxy resin 40-100 Not established. Epoxy resin 40-100 Not established.

Modified silicon dioxide 67762-90-7 1-5 TWA: 10 mg/m3 ACGIH total

TWA: 3 mg/m3 ACGIH

respirable

TWA: 6 ppm Supplier total TWA: 15 mg/m3 OSHA total

TWA: 5 mg/m3 OSHA

respirable

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

PHYSICAL STATE: Liquid. COLOR: Clear.

WARNING! MAY CAUSE ALLERGIC SKIN REACTION.

MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION.

Potential Health Effects

Eye:

Moderate eye irritation. Redness. Excess tearing.

Skin:

Allergic skin reaction. Itching. Rash. Moderate skin irritation.

Redness.

Ingestion:

May be harmful if swallowed.

Inhalation:

Moderate respiratory tract irritation. Shortness of breath. Coughing.

Conditions Aggravated by Exposure:

Respiratory disorders. Skin disorders. Eye disorders.

Chronic:

Detailed information provided in section 11.

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Product Name:

Loctite Quick Set Epoxy Gel

Item No.:

Resin (A) 01-32427

4. FIRST AID MEASURES

Eye:

Immediately flush eyes with plenty of water for at least $15\ \mathrm{minutes}$. Get medical attention.

Skin:

Immediately flush skin with plenty of water (using soap, if available) for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if symptoms occur.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation:

Remove to fresh air. If symptoms develop and persist, get medical attention.

Note to Physician:

None.

5. FIRE FIGHTING MEASURES

Flash Point:

CLOSED CUP: 478.F (248.C).

Extinguishing Media:

In case of fire, use water spray (fog), foam, dry chemicals, or CO2.

Flammable Limits:

Not available.

Special Fire Fighting Procedures:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Hazardous Combustion Products:

Oxides of carbon. Hydrocarbons. Aldehydes. Ketones. Irritating organic fragments. Acids. Phenolics.

Unusual Fire or Explosion Hazards:

None.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak:

Soak up with inert absorbent. Store in closed container until disposal.

7. HANDLING AND STORAGE

Handling:

Do not swallow. Avoid contact with eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Wash thoroughly after handling.

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MATERIAL SAFETY DATA SHEET

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Product Name:

Loctite Quick Set Epoxy Gel

Item No.:

Resin (A) 01-32427

Storage:

Keep container tightly closed. Keep in a cool and well-ventilated

For information on product shelf life, contact Loctite Customer Service at 1 (800) 243-4874

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use local exhaust ventilation if the potential for airborne exposure exists.

Eye/Face Protection:

Chemical splash goggles or safety glasses with side shields.

Skin Protection:

Use chemical resistant, impermeable gloves.

Respiratory Protection:

Use NIOSH approved respirator if there is potential to exceed any exposure limit(s).

See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Clear. Material State: Liquid.

Odor: Not available. Boiling point: 500.F (260.C) pH: Not applicable. Solubility in Water: Not available. Specific gravity: 1.1908

VOC: 0 g/l (0%) Vapor Pressure: Not available. Vapor density: >1 (Air = 1) Evaporation Rate: <1 compared to Butyl acetate.

10. STABILITY AND REACTIVITY

Stability:

Stable.

Conditions to Avoid:

None known

Incompatibility:

Oxidizing agents, Reducing agents, Acids, Alkalis. Reaction with amines and mercaptans in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes.

Hazardous Polymerization:

Will not occur.

Hazardous Decomposition Products:

None known

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TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET

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Product Name:

Loctite Quick Set Epoxy Gel

Item No.:

Resin (A) 01-32427

11. TOXICOLOGY INFORMATION

Product Toxicology Data:
Not available.

	(Carcinogen IARC	OSHA
Ingredient	NTP		
Epoxy resin	No	No	No
Epoxy resin	No	No	No
Modified silicon dioxide	No	No	No

Key to abbreviations:
 Not applicable.

Ingredient

Health Effects/Target organs

Epoxy resin Allergen. Irritant.
Epoxy resin Allergen. Irritant.
Modified silicon dioxide No target organs.

12. ECOLOGICAL INFORMATION

Ecological Information:

None known

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal:

Dispose according to EPA and local governmental regulations.

EPA Hazardous Waste Number:

Material as supplied is non-hazardous under RCRA (U.S. Federal) regulations.

14. TRANSPORTATION INFORMATION

Domestic Transportation (D.O.T. 49 CFR)-GROUND

Shipping Description:

Not regulated.

Exceptions:

Not applicable.

International Air Transportation (ICAO/IATA) -

Shipping description:

Not regulated.

Exceptions:

Not applicable.

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TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 05 of 05

Product Name: Loctite Quick Set Epoxy Gel

Item No.: Resin (A) 01-32427

Marine pollutant:

None known

15. REGULATORY INFORMATION

SARA Title III Section 313 Chemicals:

None.

SARA Title III Section 311/312:

Immediate health hazard, Delayed health hazard

Toxic Substances Control Act:

All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA Section 12(b) annual:

None.

TSCA Section 12(b) one time:

None.

Canadian Inventory Status:

All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

California Proposition 65:

This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. (Phenyl glycidyl ether, Toluene).

16. OTHER INFORMATION

NFPA Code:

Health: 1
Flammability: 1
Reactivity: 1
Special: None

HMIS Code:

Health: 1
Flammability: 1
Reactivity: 1

Protective Equipment: See Section 8.

Prepared by:

Company: Safety, Health and Regulatory Affairs - North America,

Loctite Corp., 1001 Tr Br Cr, Rocky Hill CT 06067

(24hr.) Phone: (860) 571-5100

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MATERIAL SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Loctite Quick Set Epoxy Gel

Item number:

Hardener (B) Part of kit: 01-32427

Product Type:

Epoxy hardener

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient

CAS Number %

Exposure Limits

Polymercaptan hardener

60-100 5-10

Not established. Not established.

Substituted aminophenol 90-72-2 Modified silicon dioxide 67762-90-7

1-5

TWA: 10 mg/m3 ACGIH total

TWA: 3 mg/m3 ACGIH

respirable

TWA: 6 ppm Supplier total TWA: 15 mg/m3 OSHA total

TWA: 5 mg/m3 OSHA

respirable

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

PHYSICAL STATE: Liquid. COLOR: Amber. ODOR: Moderate.

DANGER! CAUSES EYE BURNS.

HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SEVERE SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.

Potential Health Effects

Eye:

Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage.

Skin:

Harmful if absorbed through the skin. Allergic skin reaction. Itching. Rash. Severe skin irritation. Pain and discomfort. Swelling. Redness. Prolonged contact may cause chemical burns.

Ingestion:

May be harmful if swallowed.

Inhalation:

Severe respiratory tract irritation. Shortness of breath. Coughing.

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TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET

Loctite Quick Set Epoxy Gel

Item No.:

Product Name:

Hardener (B) 01-32427

Conditions Aggravated by Exposure:

Respiratory disorders. Skin disorders. Eye disorders.

Chronic:

Detailed information provided in section 11.

4. FIRST AID MEASURES

Eye:

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin:

Immediately flush skin with plenty of water (using soap, if available) for at least 15 minutes while removing contaminated clothing and shoes. Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Note to Physician:

None.

5. FIRE FIGHTING MEASURES

Flash Point:

CLOSED CUP: 250.F (121.C). Tagliabue.

In case of fire, use water spray (fog), foam, dry chemicals, or CO2.

Extinguishing Media:

Flammable Limits:

Not available.

Special Fire Fighting Procedures:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Hazardous Combustion Products:

Oxides of nitrogen. Oxides of sulfur. Ammonia.

Unusual Fire or Explosion Hazards:

Avoid the use of a stream of water to control fires since frothing may occur. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Use water spray cautiously to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak:

Soak up with inert absorbent. Store in closed container until disposal.

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TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET

Loctite Quick Set Epoxy Gel

Item No.: Hardener (B) 01-32427

7. HANDLING AND STORAGE

Handling:

Product Name:

Do not swallow. Do not get on skin. Avoid contact with eyes, skin, and clothing. Do not breathe vapor or mist. Do not get in eyes. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage:

Keep container tightly closed. Keep in a cool and well-ventilated area.

For information on product shelf life, contact Loctite Customer Service at 1(800)243-4874

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use local exhaust ventilation if the potential for airborne exposure exists.

Eye/Face Protection:

Chemical splash goggles or safety glasses with side shields. Full face shield should be used if the potential exists for splashing or spraying of product.

Skin Protection:

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Butyl gloves. Neoprene gloves. Nitrile gloves.

Respiratory Protection:

Use NIOSH approved respirator if there is potential to exceed any exposure limit(s).

See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Amber.
Material State: Liquid.
Odor: Moderate.
Boiling point: 388.F (198.C)
pH: Not applicable.

Solubility in Water: Slightly soluble Specific gravity: 1.1822

VOC: 3 g/l (0.3%)Vapor Pressure: Not available. Vapor density: >1 (Air = 1)

Evaporation Rate: <1 compared to Butyl acetate.

10. STABILITY AND REACTIVITY

Stability:

Stable.

HENKEL CONSUMER ADHESIVES

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Product Name: Item No.:

Loctite Quick Set Epoxy Gel Hardener (B) 01-32427

Conditions to Avoid:

None known

Incompatibility:

Oxidizing agents, Alkalis. Chlorinated rubber. Reaction with epoxy resins and isocyanates in large amounts or under uncontroleed conditions releases considerable heat and may release acrid fumes.

Hazardous Polymerization:

Will not occur.

Hazardous Decomposition Products:

None known

11. TOXICOLOGY INFORMATION

Product Toxicology Data:
Not available.

		Carcinogen		
Ingredient	NTP	IARC	OSHA	
Polymercaptan hardener	No	No	No	
Substituted aminophenol	No	No	No	
Modified silicon dioxide	No	No	No	

Key to abbreviations:

Not applicable.

Ingredient

Health Effects/Target organs

Polymercaptan hardener Substituted aminophenol Modified silicon dioxide

Not available. Irritant. Allergen. No target organs.

12. ECOLOGICAL INFORMATION

Ecological Information:

None known

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal:

Dispose according to EPA and local governmental regulations.

EPA Hazardous Waste Number:

Material as supplied is non-hazardous under RCRA (U.S. Federal) regulations.

14. TRANSPORTATION INFORMATION

Domestic Transportation (D.O.T. 49 CFR)-GROUND

Shipping Description:

Not regulated.

Exceptions:

Not applicable.

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET

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Product Name:

Loctite Quick Set Epoxy Gel

Item No.:

Hardener (B) 01-32427

International Air Transportation (ICAO/IATA) -

Shipping description:

Not regulated.

Exceptions:

Not applicable.

Marine pollutant:

None known

15. REGULATORY INFORMATION

SARA Title III Section 313 Chemicals:

None.

SARA Title III Section 311/312:

Immediate health hazard, Delayed health hazard

Toxic Substances Control Act:

All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA Section 12(b) annual:

None.

TSCA Section 12(b) one time:

None.

Canadian Inventory Status:

All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

California Proposition 65:

No California Proposition 65 chemicals are known to be present.

16. OTHER INFORMATION

NFPA Code:

Health: 3
Flammability: 1
Reactivity: 0
Special: None

HMIS Code:

Health: 3
Flammability: 1
Reactivity: 0

Protective Equipment: See Section 8.

Prepared by:

Company: Safety, Health and Regulatory Affairs - North America,

Loctite Corp., 1001 Tr Br Cr, Rocky Hill CT 06067

(24hr.) Phone: (860) 571-5100